

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

I. Status of Claims

Claims 1-30 are pending in this application. Claims 1, 15, 21, and 28 are independent. The remaining claims depend, directly or indirectly, from claims 1, 15, 21, and 28. Claim 4-8 and 30 have been canceled by this reply.

II. Amendments to the Claims

Claim 1 has been amended to include the limitations of claims 4-8. Accordingly, claims 4-8 have been cancelled. Claims 9-12 and 17, which depended from the now cancelled claims 4-8, have been amended to depend from claim 1 directly. The amendments to claims 1, 9-12, and 17 do not constitute new matter. Claim 30 has been canceled.

III. Rejections under 35 U.S.C § 102

Claims 1-4 and 30 were rejected under 35 U.S.C. § 102 as being anticipated by FR 2186955 issued to Mas. Claim 1 has been amended to include the limitations of claims 4-8. Claims 4 and 30 have been canceled. Thus, this rejection is moot with respect to claims 4 and 30. To the extent that the Examiner maintains the rejection to amended claim 1, that rejection is respectfully traversed.

Amended claim 1 includes limitations that the Examiner has not asserted as anticipated by the Mas reference. Namely, amended claim 1 recites at least one offload line comprising a substantially rigid lower portion comprising a top-tensioned riser. The top-tensioned riser is held in tension by a subsurface buoyant device. Mas does not disclose these features. For at least these reasons, amended claim 1 is patentable over the Mas reference. Claims 2 and 3, which depend from claim 1, are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

IV. Rejections under 35 U.S.C. § 103

REJECTION OF CLAIMS 1-6, 12-17, 19-22, AND 24-26

Claims 1-6, 12-17, 19-22, and 24-26 were rejected under 35 U.S.C. § 103 as obvious over U.S. Patent No. 3,479,673 ("Manning") in view of U.S. Patent No. 5,816,183 ("Braud") and U.S. Patent No. 3,855,809 ("Westling"). Claim 1 has been amended to include the limitations of claims 4-8. Claims 4-6 have been canceled. Thus, this rejection is moot with respect to claims 4-6. To the extent that the Examiner maintains the rejection to amended claim 1, that rejection is respectfully traversed.

Amended claim 1 includes the limitations of the original claims 4-8. The Examiner has not asserted that the combination of Manning, Braud, and Westling renders claims 7 and 8 obvious. Further, the combination of Manning, Braud, and Westling fail to show or suggest connecting the hawser and offload line to a surface buoyant device as recited in amended claim 1. Thus, amended claim 1 is non-obvious with respect to these references.

In view of the above, Manning, Braud, and Westling, whether considered

separately or in combination, fail to show or suggest the present invention as recited in amended claim 1. Thus, amended claim 1 is patentable over Manning, Braud, and Westling. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIMS 7-11 AND 27-29

Claims 7-11 and 27-29 were rejected under 35 U.S.C. § 103 as obvious over Manning in view of Braud, Westling, and U.S. Patent No. 4,182,584 ("Panicker"). Claims 7 and 8 have been canceled in this reply, but amended claim 1 now includes the limitations of claims 4-8. To the extent that the Examiner maintains the rejection to amended claim 1 and claim 27, that rejection is respectfully traversed.

Manning shows a hydrocarbon storage tank attached to a seabed. A buoyant tank supports a tether pipe (offload line) attached to the storage tank. A framed structure for mooring a ship and offloading hydrocarbons is attached to the buoyant tank.

Braud shows a subsurface buoy system. The subsurface buoy is adapted to connect to a hose that is connected to a pipeline or well. The subsurface buoy comprises a mooring means. Braud does not disclose how the mooring means and hose are made accessible to the surface so that they may be connected to a ship.

Westling shows a hydrocarbon storage tank attached to a seabed. The tank is pressure balanced by allowing sea water to enter into the lower portion. An oil delivery line (offload line) is connected on one end to the tank and on the other end to a float to be accessed from the surface. Westling does not suggest that a ship may be moored to the tank.

The Applicant respectfully submits that the combination of Manning, Braud, and Westling is improper for lacking motivation to combine. The Braud reference does not show or suggest the coupling of the subsurface buoy to top-tensioned riser or even directly to a subsea storage tank, despite having been invented long after the Manning and Westling references. The Westling reference does not show or suggest that the structure of the subsea tank might be capable of supporting the loads encountered while mooring a potentially massive tanker. The Manning reference suggests that a large framed structure would be required for mooring a ship while offloading hydrocarbons. Neither Manning, Braud, nor Westling provides any suggestion (either explicitly or implicitly) or motivation to combine the teachings of the references in a manner that would render the present invention obvious.

Even assuming the above three references were, in fact, combinable, the Examiner has failed to provide any showing as to why a person of ordinary skill would be motivated to look to Panicker. The Applicant respectfully notes that these four references do not contain an implicit or explicit suggestion to combine their various teachings, nor do they address the same technical problems. The Applicant respectfully notes that absent some suggestion or motivation to combine the prior art references, there is no *prima facie* case of obviousness.

Moreover, the Applicant believes that the obviousness rejection is based on improper hindsight reconstruction. *See* MPEP § 2145. The Applicant's specification discloses a unique combination of a pressure balanced subsea storage tank having a riser held in tension by a subsurface buoy. An offload line and hawser connect to a surface

buoy to be accessible from the surface. The combination is capable of storing hydrocarbons at great depth and offloading hydrocarbons while mooring a tanker.

The Applicant believes that this knowledge provided the blueprint for the Examiner to combine Manning, Braud, Westling, and Panicker. The suggested combination proposed by the Examiner is not a simple adaption. The combination requires adapting the Westling reference to be able to moor a tanker. Then, the tether pipe of Manning would be adapted to connect to the modified Westling tank. The surface equipment for mooring a tanker in Manning would then be removed, and replaced with the subsurface buoy disclosed by Braud. Then, a surface buoy from Panicker would be modified to connect to the hawser and offload line. Without reference to the Applicant's specification, one of ordinary skill in the art would not look to the cited prior art references to create the combination disclosed in the Applicant's specification. Accordingly, withdrawal of the § 103 rejection of claim 1 is respectfully requested.

Assuming *arugendo* that there is motivation to combine and that the combination was not based on improper hindsight reasoning, the combination of Manning, Braud, Westling, and Panicker fails to show or suggest the present invention as recited in amended claim 1. More specifically, Panicker does not disclose an offload line and hawser connected to a surface buoy. Panicker discloses a marker buoy to indicate the position of the offload line. The marker buoy is connected to the offload line indirectly through an additional line, anchor, and weighted tether line (Figure 2). The configuration in Panicker results in the offload line not being directly accessible on the surface.

The Examiner has asserted a combination of Manning, Braud, Westling, and Panicker and an additional step to reject claim 8, which is now included in amended

claim 1. The Examiner asserts that coupling the hawser to the surface buoyant device (a marker buoy) of Panicker is obvious after having combined the previously mentioned references. The Applicant respectfully disagrees. If Examiner continues to maintain that the four-reference combination and additional step of connecting the hawser to a surface buoyant device is obvious, Applicant respectfully requests an affidavit in accordance with 37 C.F.R. §1.104(d)(2) conveying the facts within the personal knowledge of the Examiner.

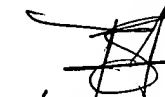
In view of the above, Manning, Braud, Westling, and Panicker, whether considered separately or in combination, fail to show or suggest the present invention as recited in amended claim 1. Thus, the claim is patentable over Manning, Braud, Westling, and Panicker. Independent claim 27 includes the limitations discussed with respect to amended claim 1, and is allowable for at least the same reasons. Dependent claims 9-11, 28, and 29 are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

V. Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 06558/011001).

Respectfully submitted,

Date: 3/22/04


#45,079
Jonathan P. Osha, Reg. No. 33,986
OSHA NOVAK & MAY L.L.P.
1221 McKinney Street, Suite 2800
Houston, Texas 77010
Telephone: (713) 228-8600
Facsimile: (713) 228-8778

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